Effects of the global financial crisis on the food security of poor urban households; CASE STUDY BOGOTA, COLOMBIA

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This report study summarizes the results of the five case studies which also have been published separately (see www.ruaf.org and www.idrc.org), next to the study in Bogota:

- Mattah, Agbeko P.D. and Jonas Kofi Akpakli, Effects of the global financial crisis on the food security of poor urban households: CASE STUDY **ACCRA**, GHANA; Humanity Focus Foundation, Accra and RUAF Foundation, Leusden, July 2010.
- Yavich, Natalia et al, Effects of the global financial crisis on the food security of poor urban households: CASE STUDY **ROSARIO**, ARGENTINA; Investiga Más, Estudios de Salud y Sociedad, Rosario and RUAF Foundation, Leusden, July 2010
- Atukorala, Sunethra, Pulani Lanerolle and Angela de Silva. Effects of the global financial crisis on the food security of poor urban households: CASE STUDY **COLOMBO**, SRI LANKA; Faculty of Medicine, University of Colombo, Colombo and RUAF Foundation, Leusden, July 2010
- Mwitwa Jacob and Phillimon Ng'andwe, Effects of the global financial crisis on the food security of poor urban households: CASE STUDY **KITW**E, ZAMBIA, School of Natural Resources, Copperbelt University, Kitwe and RUAF Foundation, Leusden, July 2010

The study was undertaken in coordination with **United Nations HABITAT**, Nairobi, Kenya and the **International Development Research Centre** (IDRC), Ottawa, Canada.

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CONTENTS

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LIST OF ACRONYMS

DANE National Bureau of Statistics
ECH Continous Household Survey
ECVB Survey of quality of life in Bogota
ENDS National Demographic and Health Survey
FGD Focus Group Discussions
ICBF Colombian Family Welfare Institute
INS National Health Institute
NCHS National Center for Health Statistics
PAHO PanAmerican health Organization
SDP District Planning Secretariat
SDE Economic Development Secretariat

1. INTRODUCTION

1.1 This study

The case study presented here is part of the "Study on the effects of the global financial crisis on the food security of poor urban households" that was undertaken in 5 cities by the RUAF Foundation on request of -and in collaboration with- the International Development Research Centre (IDRC) in Canada and UN Habitat, Nairobi.

The main objective of this study is to generate data that can help understand the extent to which rising food prices and the financial crisis are impacting on malnutrition levels in cities and how the policy and institutional context has been mitigating or exacerbating problems of food insecurity. It is hoped that the study will provide local actors with valuable information for the design of adequate policies and programmes to counteract the effects of the financial and food crisis.
An appraisal of the food security of households was conducted in selected low and middle income neighbourhoods of 5 cities in different continents through both quantitative and qualitative analysis, including Bogota (Colombia), Rosario (Argentina), Accra (Ghana), Kitwe (Zambia) and Colombo (Sri Lanka).

Although hunger is most often associated with low agriculture output, drought, and famine in rural areas, previous studies have shown that hunger is not always related to food production or availability; rather, in urban areas, other factors, such as income level, inadequate access to basic services and poor living conditions, play more significant roles. In cities, hunger is usually a consequence of people's inability to purchase food that it's both sufficient and nutritious.
Moreover, food represents about 60-80 percent of consumer spending by poor urban households in developing countries. Thus, variations in income or food prices directly translate into rising rates of malnutrition in urban areas.

The financial crisis has the potential to affect developing countries and the urban poor through economic retrenchment, negative effects on the terms of trade with the rich world and consequent job losses, especially in cities which are more directly embedded in the global economy. Because of the stage-wise nature of much household migration (Natali 2009), the reduced remittances from family members working abroad can disproportionately affect urban households.
This financial crisis came at a time when most countries are still struggling with the impacts of rising food and fuel prices. Despite the decline in international cereal export prices from their peaks in the first half of 2008 and policy responses by governments, food prices have remained at high levels in many developing and low-income-food-deficit countries compared to five years ago. It is estimated by the World Bank that the high food and fuel prices alone have increased the number of extremely poor in the world by at least 100 million. In many cases, domestic prices are still higher than before and where they have declined, price reductions have been relatively much less than those in the international markets.

Among those at greatest risk are the urban poor that are dependent on the market to access food and since the share of food in their total expenditures is much higher than that of wealthier sections of the urban population. Especially female-headed urban households are vulnerable to the impacts of the financial crisis and rising food and fuel prices.

Against this background, UN Habitat and IDRC decided Mid 2009 to undertake this study in order to generate more data on the effects of the financial crisis and rising food

prices on the urban poor and to provide local actors with valuable information for the design of adequate policies and programmes to counteract the effects of the financial and food crisis.

In this report, the implementation and results of the case study in Bogota, Colombia are represented.

The results of the comparative analysis of the outcomes of the 5 case studies are presented in the “Synthesis report”.

1.2. The socio-economic and nutritional situation in the country before the crisis

The national study on the nutritional situation in Colombia that was implemented in 2005 by ICBF (in cooperation with, INS, PRO FAMILIA, Antioquia University and PAHO) serves as a major point of reference for this case study since it deals with anthropometric and biochemical indicators, diet intake, quantitative evaluation of food security in the household, maternal breast-feeding, complementary food, physical activity, time devoted to watch television, self perception of body weight and associated behaviour, Diabetes Mellitus and hypertension (ICBF, 2006). That study was carried out together with the national demographics and health questionnaire 2005 (ENDS) that presents data for the Colombian population from zero to 64 years of age subdivided age groups, gender and socioeconomic level. In this questionnaire, Bogota represents one of the six regions, and therefore the data are specific and enable comparison with the data generated by this study.

Other specific studies of relevance include the study assessing Quality of Life (ECVB) in 2003 and 2007 implemented by the Secretariat of Planning of Mayor's Office of Bogota with support of the national planning department DANE (Secr. of Planning 2004 and 2008). These studies address topics such as: health, housing, education, work force, expenditures, quality of public utilities and perception of service.

Information regarding public policies and food and nutritional security programs is found in the documentation on the "Ibero-American seminar on food and nutritional safety in the city" organized in 2006 (Mayor´s Office of Bogota et al, 2006) and its follow up in 2008 named "food security at risk: perspective of the cities" by the Mayor’s Office of Bogota (2008).

Socioeconomic situation of the country

According to the ECH household survey of 2005 (DANE, 2006), in Colombia 42.3 percent of the urban population lives below the poverty line and 10.2% lives below the extreme poverty line. For Bogota, it has been reported that 28.4 percent of the population are below the poverty line and 4.5 percent below the extreme poverty line. Unemployment rate for Bogota city in 2005 was 13.1 percent.

The prolonged armed conflict in the country generates migration flows from rural areas towards the marginal neighbourhoods in the main cities. The displaced populations are not able to meet their most immediate needs such as housing, feeding, health, employment and freshwater. Bogota is the city which receives most of the displaced population of the country: 25,418 persons for 2005; 30,110 for 2006, 20,495 for 2007, 11,536 for 2008 and 447 for 2009

Food insecurity

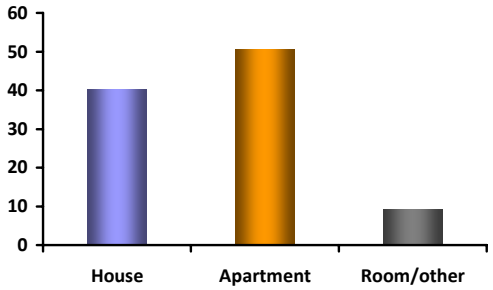
The ICBF study found that in 2005 at the national level 40.8 percent of Colombian households are facing food insecurity, and in Bogota 33.1 percent (ICBF 2006).
According to the ICBF study, 31.3 percent of households in Bogota had been forced to decrease the amount of food which they used to buy in earlier years while 26.7 percent of the households were forced to skip one meal/day due to shortage of money.
In the same study it was observed that food insecurity is closely related with the socio-economic level: at national level, of the households belonging to Sisbén socio-economic level class one (the lowest) 59.4 percent is food insecure, against 27.2 percent of households belonging to level three (middle class).
At the national level, 17.2 percent of children ranging from zero to five years of age experience growth delay corresponding to Sisbén level 1, compared to 5.7 percent present in level three.
The above indicates that the limited access of urban poor to food due to low income levels is the main cause of food insecurity not the food availability as such.

When we review the price variation of food items between 2007 and 2009, we observe that the highest price increases concerned food items, especially vegetables, legumes and fruits (DANE, 2010) .
The quality of life (ECV) survey (Secr. of Planning 2004) reveals that due to shortage of money, in 8.3 percent of households (in Bogota even 8.6 percent) some members of the family are not eating three meals a day during one or more days of the week, which represents 3.5 million people. The ECVB survey of 2007 indicates that compared to 2003, 11.7 percent of households experienced a worsening of food conditions, mainly due to loss of employment and decrease in the net income earned by the household (Secr. of Planning, 2008).

1.3. The Bogota context of the study

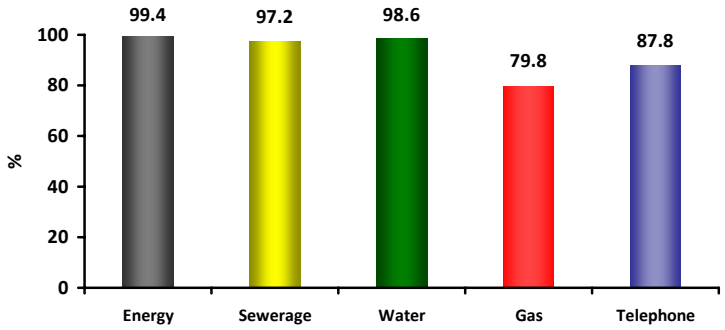
According to the forecast figures of population reported by the last census (DANE, 2006), the urban population in Bogota DC currently counts over 7.2 million inhabitants. In accordance to the census, households of the urban area of Bogota are formed in average by 3.5 persons. Over 40 percent of households live in houses and over 50% in apartments, while 9 percent have only a room or similar (Figure 1).

Figure 1 Housing types in Bogota.



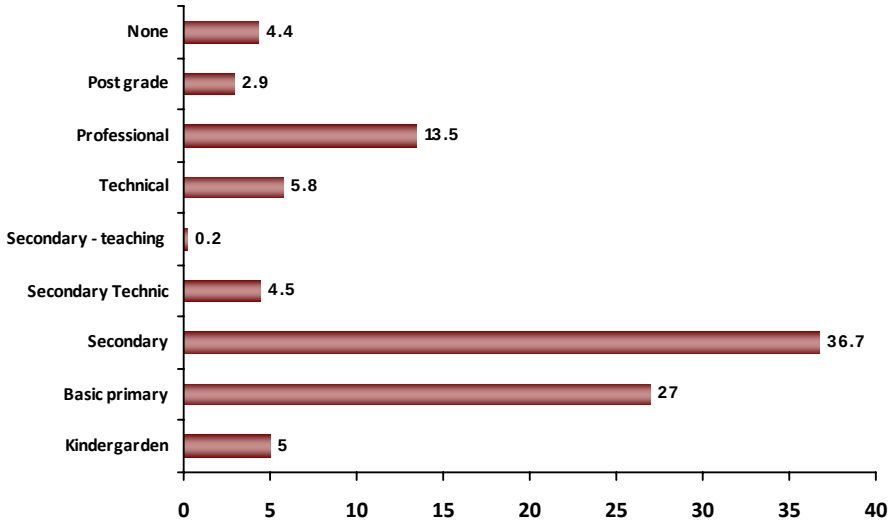
With regard to coverage of public utilities, more than 98 percent of households count with energy, sewerage and water services (Figure 2).

Figure 2 Coverage of public services in Bogota



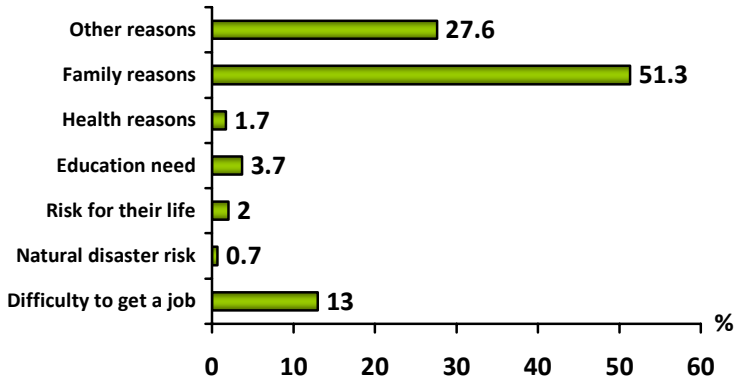
With respect to the population, 47.4 percent are men. Less than 1.7 percent of the population acknowledges being of indigenous population, raizal, mulato, palenquero, black, Afro Colombian or Afro descendent.
With respect to the educational status, approximately 22.2 percent have performed technical, professional or graduate studies (figure three). Likewise, 21.3 percent of the population is currently living in common law partnership.

Figure 3 Educational level of Bogota population.



Approximately 4 out of each 10 persons residing in Bogota come from other cities, and 16.7 percent have changed place of residence in the past five years in order to gain access to a job or academic training opportunities (figure four).
It is also important to highlight that 2.8 percent of households have experience with international migration, with the USA (49.3 percent), Spain (13.2 percent), Venezuela (5.4 percent), and Canada (4.3 percent) as the main destination countries.

Figure 4 Causes for changing residence within the past five years.



San Cristobal, the selected study area for this case study (see the next chapter) holds approximately 410,000 inhabitants in ca 115,000 households and 110,000 houses/apartments with a built up area of 1442 hectares and nearly 3500 hectares open spaces (see tables 1 and 2).

Table 1 Urban and rural surface of San Cristobal and Bogota (2009)

Locality	Area (Ha)	Urban Area			Rural Area		
		Urban land	Conserv. area	Total	Rural land	Conserv. area	Total
San Cristobal	4,910	1,442	206	1,648	0	3,262	3,262
Bogota Total	163,659	35,804	5,584	41,388	49,982	72,289	122,271

Source: Mayor of Bogota- Planning secretariat - 2009

Table 2 Number of houses and households in San Cristobal and Bogota (2006 – 2009)

Locality	Number of Neighbourhoods	Housing units		Households	
		2006	2009	2006	2009
San Cristobal	265	105,804	109,979	111,495	115,887
Bogota Total	5,145	1,809,523	1,970,461	1,980,445	2,153,365

Source: DANE-SDP, 2009

Table 3 shows that in San Cristóbal, poverty, according to the perception of the households in this area, has lowered from 61.9 to 48.9 percent.

Table 3 Perception of poverty 2003 -- 2007 (%)

Locality	Do you consider your household to be poor				growth rate
	2003		2007		
	yes	no	yes	No	
San Cristobal	61.9	38.1	21.6	78.4	0.05
Bogota Total	46.1	53.9	36.3	63.7	0.18

Source: DANE – SDP, 2008

2. METHODOLOGY AND ORGANISATION OF THE STUDY

2.1. Introduction

The studies assessed current socio-economic circumstances of households, food practices, coping strategies, the policy environment and current nutritional status of women and young children.

The case study generated data through: 1. household surveys, 2. 24 hour food recall, 3. anthropometry of under-five year olds and women from 15 to 49, 4. Focus Group Discussions with key informants in the selected neighbourhoods and 5. Individual interviews were held with officials and experts in order to get their opinion on policy issues.

2.2 Composition of the study team

To conduct this study a research team was established that included highly qualified researchers as well as a field team composed by technicians and professional staff of Nutrition Group of the National Health Institute with experience in this type of survey and professional staff of IPES Colombia with experience in urban agriculture research in San Cristobal and staff of the Bogota "Without Hunger" Programme. Data processing was performed by INS and the analysis was made by IPES and INS.

2.3 Selection and training of the field team

Professional staff, with proven experience in the collection of survey data and anthropometric measurements, was recruited to conduct the field work. The professionals were further trained with regard to the sampling methodology, the application of questionnaire and the collection information and performance of anthropometric measures.

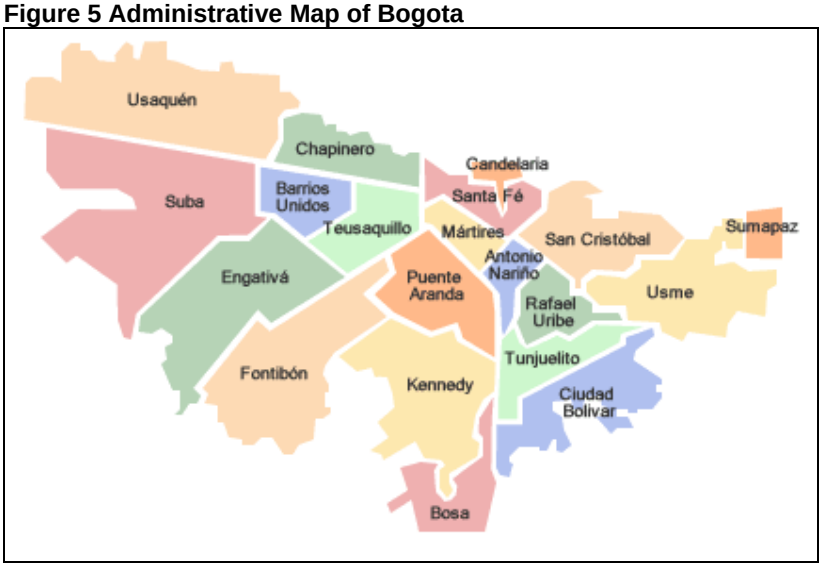
2.4 Adaptation and testing of the survey questionnaire and other tools

The survey format provided by RUAF was adapted to the local conditions in Bogota and translated into Spanish. The survey instrument was pilot tested to verify efficiency and reliability leading to some minor improvements. Also the guidelines for conducting the Focus Group Discussions and the individual interviews with experts were prepared.

2.5 Selection of neighbourhoods and households to be included in the study

The case study was implemented in San Cristobal which is one of the 20 localities in which Bogota is divided administratively (see figure 5).

Figure 5 Administrative Map of Bogota

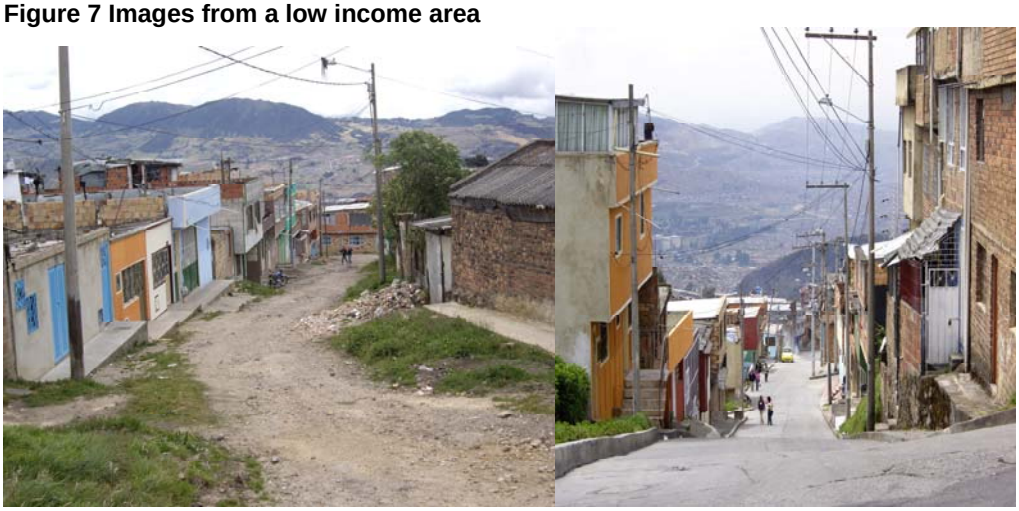


The San Cristobal area was selected since:

a. It includes both level 1 (very low socio-economic status) neighbourhoods (329 blocks) and level 3 (middle-low socio economic status) neighbourhoods (288 blocks) which facilitates a comparison of the effects of the food crisis among households from different socio-economic status, as planned by the study. See Table 4 and Figure 6 (level 1 low-low areas indicated in red and the level 3 middle low area indicated in clear blue).
b. San Cristobal is quite representative of the Bogota localities of the middle-low and lower strata. Approximately 75% of households in Bogota are located in the 3 lower strata (Table 4). It is one of the Municipalities receiving displaced people, and is the sixth in population. It has no upper strata housing.
c. The researchers were already familiar with this area, its people and its authorities through previous projects. This facilitated enormously the realization of the field work and the participation of the inhabitants in the survey, the focus group and key informant interviews.

Figure 6 Images from a middle income area

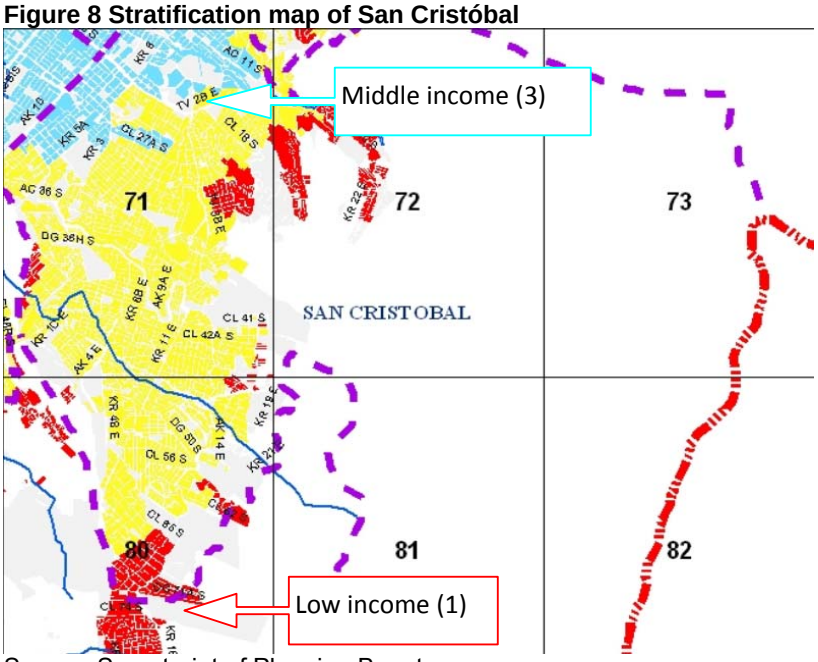
Figure 7 Images from a low income area



With help of the stratification maps of the Bogota Planning Secretariat a random sample was drawn of the neighbourhoods and cartographic within San Cristobal to include in the survey in the level 1 and level 3 area respectively. The socio economic status of the selected blocks was checked again with help of the data of the Superintendence of public utilities, 2007. Through field observation the stratification

map was actualized (e.g. adding blocks that were recently built up, sub-dividing one block

Figure 8 Stratification map of San Cristóbal



Source: Secretariat of Planning Bogota

The universe of the study is composed by households residing in the 2 selected neighbourhoods of San Cristobal (1 of low-low and 1 of middle-low socioeconomic level) in the locality of San Cristóbal, Bogota (Table 5).

Table 5 Total blocks, population, housing units and households in the selected neighbourhoods

Type	Low low	Middle low	Total
Blocks (A)	40	68	108
Housing units (B)	1,107	2,077	3,184
B/A	28	31	29
Households (C)	1,792	2,851	4,643
People (D)	8,070	10,957	19,027
D / C	4,5	3,8	4,1
Under 6 years	904	976	1,880
Women 15 - 49	2,229	3,130	5,359

Within the selected neighbourhoods / cartographic blocks a random sample of households was drawn. It was not possible to use methods proportional to the size to make a probability selection of blocks because the Secretary of Planning does not provided the stratification information of the blocks. Also the national population and housing census of 2005 does not include such information.
In the first stage housings units were selected, in the second stage households were selected and in the last stage, persons below than six years of age and women in the fertile age (15-49 years) were selected. Since a registry of housing units and households in each block was not available we first had to develop such a list with help of the basis of the cartographic map and completed by field reconnaissance visits. For all buildings in the block, the number of households was defined by observing things like number of different name plates and door bells, number of electricity, water or gas

counters, changes in paint and curtains at different floors, etcetera asking available persons in that building about the number of households in that building.
In each block an equal number of housing units (10) were selected, applying a systematic algorithm. If a block had less than 10 housing units, all units were selected.
Whenever in a housing unit there was more than one household, the households were selected based on the following table:

Table 6 Table for selection of households

No households in the selected housing units	Number of households to be selected
2	2
3	1
4	3
5	1
6	4
7	3
8	5
9	3
=/>10	3

In the end 1508 housing units / 1434 households were selected and an average of 2.5 visits per selected household were made in order to impart the questionnaire to 604 households, which in average included 4 persons. The total coverage is represented in table 7.

Table 7 Coverage of the survey

Type	Low low	Middle	Total
Selected Housing units	441	1,067	1,508
Selected Households	409	1,025	1,434
Visits to selected households (A)	446	1,085	1,531
A/B	1.5	3.6	2.5
Households surveyed (B)	303	301	604
People in households surveyed (C)	1,342	1,135	2,477
C / B	4.4	3.8	4.1
Children 0-5 years with anthropometric measurements	109	70	179
Women 15 to 49 with anthropometric measurements	204	156	360

2.6 Implementation of the study

2.6.1 Survey data collection and processing

Survey data were collected using mobile capturing devices (MCD) and an application designed for this purpose. Each data collector counted with 2 MCD in order to ensure continuation of the data collection in case of improper operation of a MCD. The menu allowed controlled identification of the households that were visited and to directly manage the linkages between the identifiers of the household and the data register.
In order to have an effective and detailed control of the advance of the collection process, the information was consolidated on a daily basis. The results of all interviews were sent by the data collectors to the headquarters by e-mail with attached a data file generated by the MCD.
Registers were created, one with data and questions related to the household and another with information on individual persons and a third one with the anthropometric

measurements. The data were tabulated in order to verify the information and detect possible mistakes in the collected data with help of Visual FoxPro 7.0. Finally, the data were imported to SPSS to create contingency tables to verify performance and coverage.
The information was then sent to the field work coordinator who verified the collected in order to ascertain its validity. Subsequently the research coordinator provided feedback to the data collectors in charge of the interviews and the anthropometric measurements and where needed asked for correction or justification of apparently mistaken data.
Data adjustment was performed in the consolidation tables with Visual FoxPro to variables such as: block, housing unit, household, economic class, etcetera, but it is highlighted that no correction or adjustment was performed on sensitive variables during the random selection process, selected persons or measurement. The use of MCDs made it easy to list all persons in the household according to age, which made it easy to select the persons to be included in the anthropometric measurements, adding ad random generated numbers to each household member. In the case of women from 15 to 49 years of age, the one woman with the lowest random number was chosen. For the children 0-5 years, if the household had two minor children, the one with the corresponding lowest random number was chosen. If in the household there were more than two minors below six years of age, two of them were chosen, corresponding to the two lowest random numbers.

Figure 9 Household interviews and anthropometric measurements

The analysis of the nutritional status of young children was based on the anthropometric measurements was performed taking into account the latest recommendations of the NCHS (Table 8).

Table 8 Criteria applied to determine the nutritional status of children 0-5 years

ζ = z score	Height for age	Weight for height	Weight for age
ζ < -2	Stunting	Acute Malnutrition	Malnutrition global
-2 ≤ ζ < -1	At risk	At risk	At risk
-1 ≤ ζ ≤ 1	Adequate growth	Proper weight for height	Proper weight for age
1 < ζ ≤ 2	Accelerated growth	Overweight	Overweight
ζ > 2		Obesity	Obesity

Source: NCHS, 2008

To assess nutritional status of 15 to 49 years old women, the body mass index scale was used, according to the following categories: Low weight: BMI less than or equal to 18.5 kg; Normal Weight: BMI 18.5 - 24.9 kg; Overweight: BMI 25-29.9 kg; Obesity: BMI equal or more than 30 kg.

2.6.2. Focus Group Discussions

Four Focus Group Discussions (FGDs) were organized: 2 with persons corresponding to socioeconomic class 1, and 2 with persons corresponding to socioeconomic class 3. In average, six persons participated in each focal group. The duration of the activity was in average one to two hours. The majority (87.5) of the FGD participants were women ranging from 19 to 78 years of age with a concentration in the 31 to 60 years age span (57.1 %). The group mainly consisted of the persons in charge of caring for the children and the food preparation activities, including purchase of food in their household. A low number of men participated, most of them more than 40 years of age and often unemployed, as well as some leaders belonging to community organizations. Table 9 indicates the main topics covered during the FGD's.

Table 9 Topics covered in the FGDs

Social Organization	Characterization of family structures Characterization of gender roles
Family Economics	Identification of income sources for the households Characterization of expenditure priorities
Food practices	Identification of (changes in) main types of food in the diet Characterization of (changes in) number of meals Characterization of (changes in) access to food and food related expenditures
Perception of the economic crisis	Identification of perceptions that the community has with respect to the economic crisis faced by the city. Identification of coping strategies practiced by the households to face the economic and food crisis
Perception of government policies on food security and nutrition	Identification of the degree of knowledge of the existing policies and programmes and their degree of appropriation/use by the households. Identification of benefits and limitations perceived by community with respect to these policies and programmes.

Also four in-depth interviews were carried out, two in each socio-economic group, with selected key informants residing in San Cristóbal locality, with the purpose of collecting more information about the various ways the local population perceives the effects of current economic crisis on local food security and feeding practices and the coping strategies applied by these households.
These interviews lasted in average 45 to 60 minutes.

The FDGs and in depth interviews were audio recorded with informed consent of the participants and systematized and analyzed after the sessions.

2.6.3. Interviews of officials and experts

In order to get their opinion regarding the policy measures taken by the Colombian government at national and/or city level, we also interviewed some officials and experts. The experts who participated in the study were professionals currently working in various departments of the District Municipality of Bogota who are coordinating projects and programmes in the area of food security and nutrition and with many years of experience. The persons interviewed included senior staff of the Secretariat for Social Integration, the Secretariat for Economic Development, the

Secretariat of Public Health, local hospitals, the National Health Institute and an independent social action consultant.

With these persons we discussed the following topics:

- What have been the food price fluctuations in the past two years? How would you describe the impacts of the fluctuation in the food situation of the population of the city?
- What have been the factors that contributed to these price fluctuations?
- Which are the principal challenges coped with in the food and nutrition security setting?
- Which are the policies at national and local level that government has adopted in response to the global financial and food crisis?
- What other policies and programmes with respect to food and nutrition security exist? How long have they existed?
- Which are the main traits of these policies?
- How would you characterize the execution of these policies? Which have been the major limitations that these policies have coped with?
- What have been the impacts of these policies in the population?
- How would you characterize the sustainability and efficacy of these policies?
- Which are the elements that you consider necessary to improve these policies, their impact and sustainability?
- How would you describe your experience working in nutrition security topics?

2.6.4 Review of secondary information

Parallel to the interviews various documents were reviewed pertaining to topics of the socio-economic situation in the past years and the trends in the food security and nutritional status of households in Bogota and national level, including the documents mentioned in par. 1.2. Also a number of documents were reviewed that throw light on the policy responses of government to the 2008 crisis, among which the national food and nutritional security policy (Republic of Colombia, 2007), the Bogota policy for food and nutritional security (Mayor of Bogota, 2007) and the Master plan for food and food security (Mayor of Bogota, 2006).

2.6.5. Complementarity of quantitative and qualitative tools

The research was designed such that the quantitative information collected through the survey questionnaire could be combined with qualitative information obtained from the FDGs and individual interviews and reviews of secondary information. When using qualitative and quantitative strategies it is possible to acquire various types of information about the phenomenon under study which may be of complementary nature (Creswell, 2003). The quantitative instruments deal with quantifiable data, show the magnitude of certain phenomena, reveal certain correlations between variables and allow testing the statistical significance of these correlations. Meanwhile the qualitative information gives more insight in the perceptions that a certain category of the population has with regard to the phenomena under study, their priorities and interests, values and ideals, which are relevant for better understanding the (why and how) of the phenomena under study. In this regard, qualitative research emphasizes the way how persons understand, interpret and perceive social reality (Berger and Luckman 1986; Creswell, 2007; Guber 2001). Although qualitative and quantitative data do complement each other, they do not necessarily reach the same conclusion.

3. RESULTS OF THE STUDY

3.1. Demographic and socio-economic characteristics of the surveyed households

Household structure

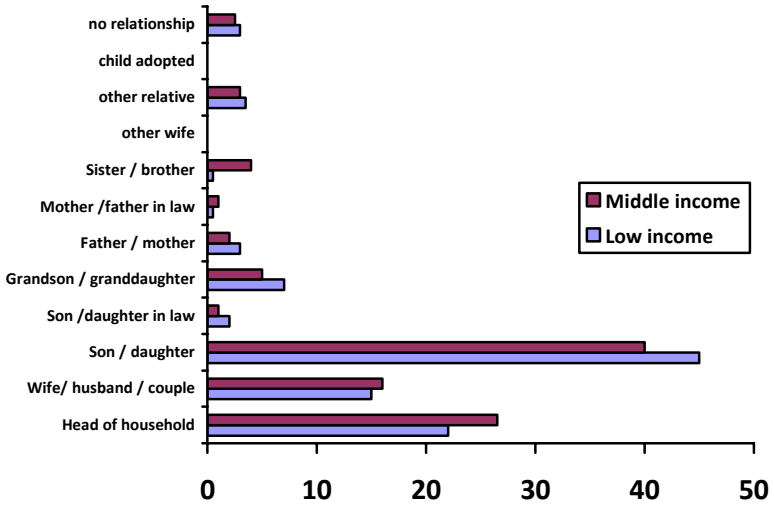
In both the low-low and middle-low economic groups the households are mainly formed by parents and children. About 20% of the persons in the households are grandparents, spouses of children, cousins, etcetera (Figure 10).

The Focus Discussion Groups revealed with respect to family structure that in the case of the low-low socio-economic group the households are larger and often include also members of the extended family such as grandchildren, spouses of children, uncles or cousins. In this group maternity often starts at adolescent years. Likewise it is frequent to find families where the head of household is a single mother.

With respect to middle-low socioeconomic group the households are smaller and most often just parents and children.

According to the participants in the FDGs the family structure strongly influences how the income is used and the food costs of the households.

Figure 10 Kinship relations

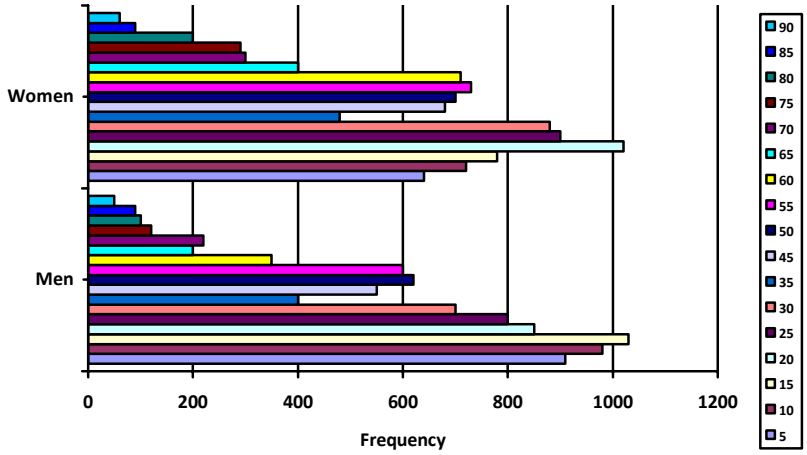


Age and sex

The age distribution the total surveyed population is of the expansive type with approximately 40 percent of the population below 20 years of age (Figure 11).

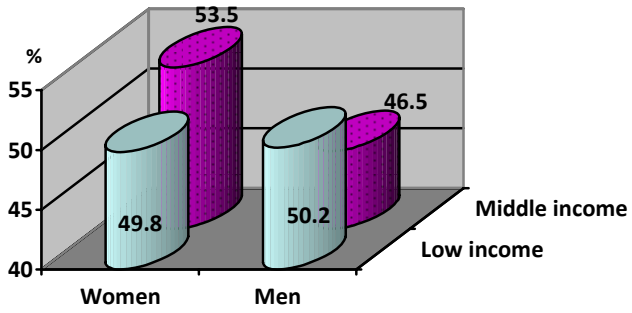
When analyzing the age distribution for each of the two socio-economic groups, it is found that the low-low socio-economic group is expansive with approximately 54% of the people below 25 years of age, while the middle-low socio-economic group is stable with about equal amounts of people in the age groups 0-24 years and 25-49 years respectively.

Figure 11 Distribution of the surveyed population by age and sex.



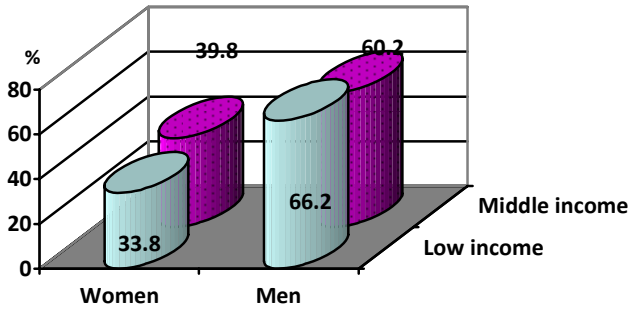
While in the low-low households the number of men and women is about equal, in the middle-low economic group the women are slightly in the majority (53.8 %) (Figure 12)

Figure 12 Men and women by socio-economic group



Moreover, in the low-low economic group, 33.8 percent of the heads of households are women, against 39.8 percent in the middle-low economic group (Figure 13).

Figure 13 Gender of head of households by socio-economic group



Marital status

About 65 % of the households is currently married or lives in common law union, which must be associated to the average age of people which is 50 years of age (Table 10). It is observed while 43.6 percent of the heads of households in the low-low socio-economic group lives in common law union, this is only 19.5 percent in the middle-low socio-economic group. For marriage these figures are about the reverse for both groups.

Table 10 Marital status of the head of households by socio-economic group

	Socioeconomic Group					
	Low-low		Middle-low		Total	
	n	%	n	%	n	%
1 Single	180	9.7	518	17.6	698	14.5
2 Married	451	24.3	1,259	42.8	1,710	35.6
3 Common law union	811	43.6	574	19.5	1,385	28.8
4 Separated	269	14.5	227	7.7	496	10.3
5 Divorced	0	0,0	41	1.4	41	0.9
6 Widower	148	7.9	321	10.9	469	9.8
Total	1,859	100	2,940	100	4,799	100

Length of residence in Bogota

When analyzing the time of residence it is found that only about 30 % of the surveyed population has been living three or more years in Bogota (Table 11). In the case of heads of households this percentage is even lower (24 %).

These figures indicate the massive migration from other areas to Bogota in order to gain access to better occupational or educational opportunities.

Table 11 Length of residence in Bogota of the surveyed population by socio-economic group

	Socio-economic group					
	Low-low		Middle low		Total	
	n	%	n	%	N	%
Less than a year	1,061	13.2	1,389	12.7	2,450	12.9
Between 1 and 2 years	1,274	15.8	1,886	17.2	3,160	16.6
3 years or more	5,728	71.0	7,671	70.1	13,399	70.5
Total	8,063	100	10,946	100	19,009	100

Religion

Table 12 shows that 78.5% of the households consider themselves to be Catholic.

Table 12 Religion of the surveyed population by socio economic group

	Socio-economic group					
	Low low		Middle low		Total	
	n	%	N	%	n	%
Catholic	6,741	83.6	8,182	74.7	14,923	78.5
Protestant	0	0.0	17	0.2	17	0.1
Pentecostal / Charismatic	38	0.5	47	0,4	84	0.4
Other Christians	921	11.4	1.346	12.3	2,267	11.9
Evangelical	107	1.3	265	2.4	372	2.0
No religion	256	3.2	830	7.6	1,086	5.7
Other	0	0.0	261	2.4	261	1.4
Total	8,063	100	10,946	100	19,009	100

Employment and Occupation

In the Low-low socio-economic group dominated workers in a private company (40%) with self employed/independent workers ranking third (21.5%), after the unpaid family workers (24.7 %), while in the middle-low socio-economic group dominated the self employed / independent workers (44.1 percent) with workers in private organizations ranking second (33.3%) (Table 13).

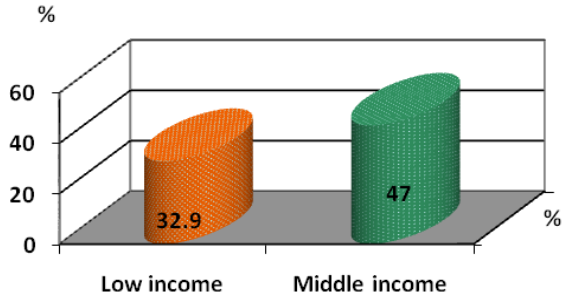
Table 13 Labour occupation by socio-economic group

	Socio-economic group					
	Low-low		Middle-low		Total	
	n	%	n	%	N	%
Worker of private company	495	40.0	561	33.3	1,056	36.1
Worker/employee of governmental organization	0	0.0	77	4.6	77	2.6
Independent professional	0	0.0	17	1.0	17	0.6
Self employed/independent workers	266	21.5	744	44.1	1,010	34.6
Employer	11	0.9	47	2.8	58	2.0
Unpaid family worker[1]	306	24.7	189	11.2	495	16.9
Domestic worker (paid)	159	12.9	50	2,9	209	7.1
Total	1,238	100	1,686	100	2,924	100

Figure 14 shows that about 47 percent of women in the fertile age (15-49 years) of the middle-low socio-economic group are employed, while in the low- low socio-economic group this is only 32.9 percent. Of course this is closely related to higher educational level in the middle income group.

The Focus Discussion Groups revealed that -although it is frequent that women work- it is socially expected that men provide for the economic needs of the household, while the women are expected to take care of household chores and the care for the children. Women participants expressed that they mainly take on a job when the income of the family is not sufficient or when her spouse has lost his employment. But even then it is mainly the women, who are in charge of taking care of activities related to buying and preparing food for the household.

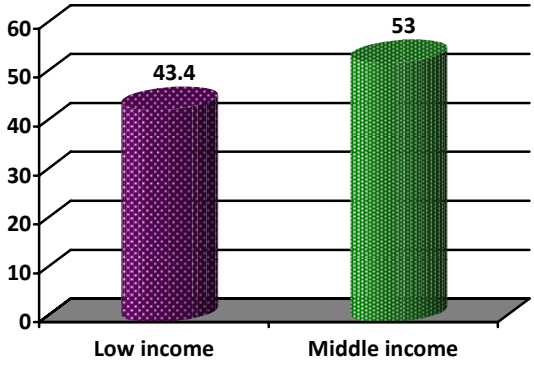
Figure 14 Women of fertile age currently working by socio-economic group



Last year still 53 percent of the women in fertile age in the middle-low socio-economic group had work and 43.4 percent in the low-low socio-economic group, which seems to indicate that both groups of women are hit by the economic crisis but that for women from the low-low socio-economic group it is somewhat more difficult to keep their job than for women in the middle income group (Figure 16).

[1] The category "unpaid family worker" includes persons that perform tasks in the households as care taker without financial compensation.

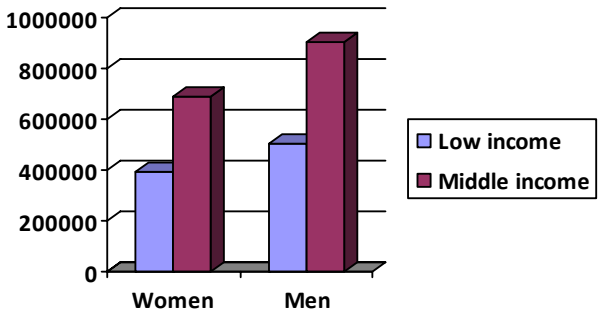
Figure 15 Women of fertile age who had employment last year



Income

Figure 16 shows the difference in average gross income between men and women and in the two socio-economic groups.

Figure 16 Average gross incomes (pesos) of women and men by socio-economic group



In average, a low-low level household has $ 268,000 monthly income (US$140), while the middle-low level households have in average nearly three times as much ($ 853,000 – US$450). Table 14 shows the number of income sources per household

Table 14 Number of income sources per household by socio economic group

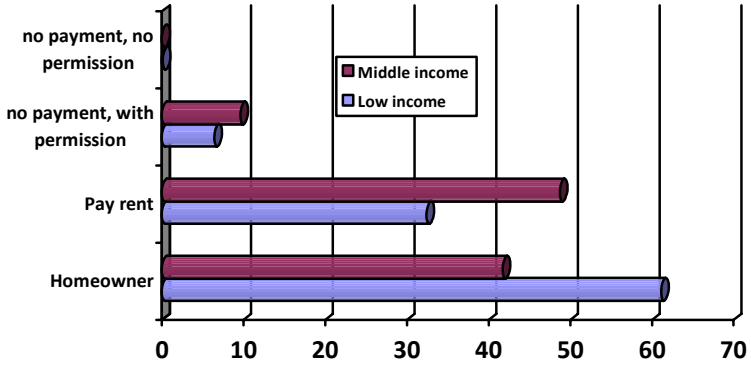
	Socio-economic group					
	Low low		Middle low		Total	
	n	%	n	%	n	%
1	957	57.9	1,117	41.9	2,073	48.0
2	466	28.2	1,028	38.6	1,494	34.6
3	191	11.5	428	16.1	619	14.3
4	39	2.4	61	2.3	100	2.3
5	0	0.0	29	1.1	29	0.7
6	0	0.0	2	0.1	2	0.1
Total	1,652	100	2,665	100	4,317	100

Ownership of the house

The households in the middle-low socio-economic group are mainly tenants paying rent (48.7%) while the households belonging to the low-low socio-economic group are mainly “owners” (over 51%) (Figure 17). This apparent contradiction can be explained

many housing programmes by NGOs and government assist households from this socio-economic group, especially female headed households, to build or upgrade their houses. Moreover, one should consider that most of the houses "owned" by the low low income households are small, made of low cost materials and often built bit by bit on land that was "inherited" from relatives. Only just a few individuals or households in the middle-low socio-economic group have access to these subsidy programs. Moreover, households of the middle income group prefer to live in areas of better structure and image, even though they have to pay rent there (thus reducing the budget available for other expenditures).

Figure 17 House ownership by socio-economic group



3.2. Food intake

Liquids

Table 15 shows that the intake of water by children 0-5 years of age is below the recommended levels. In the low-low economic level only 37.5 percent of the children drank water one or more times during the previous day/night, while this was 60 % in middle-low income group. In addition 22.1 % of the young children in the low income group and 18.5 % in the middle income group consumed water in combination with commercially produced infant formula one or more times during the previous day.

Close to 50% of the young children (0-5 years) had a moderate consumption (1 or 2 times) of milk (fresh or powdered) during the previous day. Remarkably this percentage is higher for the low-low socio-economic group (57%) than for the middle-low income group (41.4 %) which is probably due to the social feeding programmes.

With regard to fruit juice consumption, 68.3 % of the young children in the low-low socioeconomic group drank fruit juice the previous day one or more times against 78.6 % in the middle-low socio-economic group.

Table 15 Intake of liquids by children 0-5 years by socio-economic group

	Low-low						Middle low					
	None		1-2 times		> 2 times		None		1-2 times		> 2 times	
	N	%	N	%	N	%	n	%	n	%	n	%
Water	65	62.5	26	25	13	12.5	28	40	25	35.7	17	24.3
Commercial infant formula	80	77.9	16	15.4	8	7.7	57	81.4	5	7.1	8	11.4
Milk	24	23.1	57	54.8	23	22.1	18	25.7	29	41.4	23	32.9
Fruit Juices	33	31.7	63	60.6	8	7.7	15	21.4	45	64.3	10	14.3
Other (soft drinks, coffee	46	44.2	50	48.1	8	7.7	37	52.9	27	38.6	6	8.6

FGD participants of the low low economic group mentioned that they consume fruits mainly in juices. Guayaba was the most widespread fruit consumed because of its low price and because it is also perceived as a fruit beneficial for children's health. In the low-low economic group 55.8 % of the young children drank another liquid (soft drinks, tea, etcetera) during the previous day one or more times, against 47.1 % in the middle-low socio-economic group.

Of the women in the fertile age (15-49 years) approximately 55.3 % of the women in the low-low socio-economic group and 66.7 % in the middle-low socio-economic group reported that they drank water during the previous day/night one or more times (Table 16). About 43 % of the women in both socio-economic groups did not consume any milk the previous day. Women from the middle-low income group consumed fruit juice more frequently (75 % one or more times during the previous day) compared to the women in the low-low socio-economic group (53.3 %). The intake of other liquids (soft drinks, tea and coffee) was more or less equal for the women of both income groups (about 77 % at least once).

Table 16 Intake of liquids by women 15-49 years by socio-economic group

	Low-low						Middle low					
	None		1-2 times		>2 times		None		1-2 times		>2 times	
	n	%	n	%	n	%	n	%	N	%	N	%
Water	88	44.7	60	30.5	49	24.9	52	33.3	49	31.4	55	35.3
Milk	87	44.2	100	50.8	10	5.1	65	41.7	82	52.6	9	5.8
Fruit Juices	92	46.7	96	48.7	9	4.6	39	25	101	64.7	16	10.3
Other (soft drinks, tea, coffee)	43	21.8	119	60.4	35	17.8	37	23.7	86	55.1	33	21.2

Solid Foods

With regard to consumption of solid nutrients (Table 17 for children 0-5 years and Table 18 for women 15-49 years) one can observe that only 30 percent of all women and children eat legumes the previous day. More women in the middle income group eat legumes (38%) than in the low income group (20%). About 48% of the children ate some milk derivatives such as cheese or yoghurt in the precious day, while only about 28% of the women had some cheese or yoghurt. Slightly more children and women in the middle socio-economic group eat these products than in the low income group.

With respect to protein intake: approximately 80% of the young children (80.5 % in the low low group and 86.5 in the middle low group) and 70 % of the women had some meat, fish or eggs in the previous day. Thirty percent of the women in the low income group and 41 percent in middle income group ate even twice or more times such products in the last 24 hours. Of course this does not say much about the amount of proteins consumed since the quantities of meat or fish eaten might be minimal.

The grain consumption of women of both income categories is quite similar (more than 90 % ate grains in the previous day of which 46% once and 40% twice) while the consumption of grains by young children from households in the middle-low socio-economic group is much higher (84.1%) compared to the children in the low-low group (75.1 % had grains at least once in the previous day).

Approximately 30 % of the children have eaten squash, pumpkin, carrots and ahuyama during the previous day. Of the women in the low-low economic level only 11 % ate such products during the last day against 26 % in the middle income group.

About 80% of the young children consumed carbohydrate flour from roots and tubers while about 83% of the women ate such products in the last 24 hours. The data show hardly any difference for the two socio-economic groups.

Green leafy vegetables are consumed by 30.6% of the young children in the low-low socio-economic group against 42.7% in the middle income group. For the women in the fertile age these figures are about 37 and 41 % respectively. Regarding the consumption of fruits (source of vitamin A and C), it was found that more children from

the middle income socio-economic group consume fruits (especially “other fruits” see the table) than the children in the low-low income group (for “other fruits”: 65% against 49%), and the women of both groups show a similar difference (for “other fruits”: 61% against 45%).
When we compare our data with the data for Bogota of the ENSIN questionnaire (ICBF, 2005) then it seems that protein intake by young children has increased since 2005: in this survey over 80% of the children ate the previous day some meat fish or eggs as sources of protein, whereas the ENSIN questionnaire found that 45.5 percent of children ate eggs and 38.6 % ate beef as main sources of protein in 2005. This may be explained by the fact that since then feeding programmes have been launched for children and their families in the low socio-economic classes.

Table 17 Consumption of solid foods by children 0-5 years by socio-economic group

	# of times consumed	Socio-economic Group					
		Low-low		Middlelow		Total	
		N	%	n	%	N	%
Legumes, such as lentils, beans, soy or peanuts	None	639	73.1	661	67.7	1,301	70.3
	1 time	171	19.5	184	18.9	355	19.2
	2 times	64	7.4	76	7.7	140	7.6
	More	0	0.0	55	5.6	55	3.0
	Total	874	100	976	100	1,851	100
Cheese or yogurt	None	442	50.6	437	44.8	880	47.5
	1 time	355	40.6	385	39.5	740	40.0
	2 times	57	6.5	154	15.7	210	11.4
	More	21	2.4	0	0.0	21	1.1
	Total	874	100	976	100	1,851	100
Meat, fish, other seafood , eggs, etcetera	None	171	19.5	132	13.5	303	16.4
	1 time	422	48.3	383	39.2	805	43.5
	2 times	247	28.3	412	42.2	660	35.6
	More	34	3.9	49	5.1	84	4.5
	Total	874	100	976	100	1,851	100
Grains like corn, rice, wheat, oats, sorghum	None	218	24.9	155	15.9	373	20.2
	1 time	324	37.1	344	35.2	668	36.1
	2 times	325	37.2	382	39.1	707	38.2
	More	7	0.8	96	9.8	103	5.6
	Total	874	100	976	100	1,851	100
Squash, carrot and pumpkins	None	580	66.3	706	72.3	1,286	69.5
	1 time	227	26.0	204	20.9	431	23.3
	2 times	67	7.7	66	6.8	133	7.2
	Total	874	100	976	100	1,851	100
Roots or tubers such as potatoes, cassava, banana,	None	166	19.0	205	20.9	371	20.0
	1 time	402	46.0	405	41.4	807	43.6
	2 times	306	35.0	359	36.8	665	35.9
	Total	874	100	976	100	1,851	100
Green leafy vegetables	None	606	69.3	562	57.6	1,169	63.1
	1 time	238	27.2	348	35.6	585	31.6
	2 times	31	3.5	61	6.2	91	4.9
	More	0	0.0	6	0.6	6	0.3
	Total	874	100	976	100	1,851	100
Mango, papaya or guava	None	541	61.9	516	52.9	1,058	57.2
	1 time	297	34.0	401	41.0	698	37.7
	2 times	21	2.5	45	4.6	66	3.6
	More	14	1.6	14	1.5	29	1.5
	Total	874	100	976	100	1,851	100
Other fruits (bananas, apples, avocados, oranges, pineapples, etc.)	None	449	51.3	347	35.5	795	43.0
	1	351	40.2	469	48.0	820	44.3
	2	52	6.0	132	13.5	184	9.9
	More	22	2.5	29	2.9	51	2.7
	Total	874	100	976	100	1,851	100

Table18 Consumption of solid foods by women 15-49 years by socio-economic group

	Number of times consumed	Socio-economic Group					
		Low-low		Middle low		Total	
		n	%	n	%	n	%
Legumes, such as lentils, beans, soy or peanuts	None	1,538	70.6	1,938	61.9	3,476	65.5
	1 time	501	23.0	869	27.8	1,370	25.8
	2 times	137	6.3	323	10.3	460	8.7
	Total	2,177	100	3,130	100	5,307	100
Cheese or yogurt	None	1,636	75.2	2,167	69.2	3,803	71.7
	1 time	472	21.7	783	25.0	1,254	23.6
	2 times	34	1.5	173	5.5	207	3.9
		22	1.0	7	0.2	29	0.5
	More	14	0.6	0	0.0	14	0.3
	Total	2,177	100	3,130	100	5,307	100
Meat, fish, other seafood , eggs, etcetera	None	245	11.3	443	14.2	689	13.0
	1 time	1,271	58.4	1,267	40.5	2,538	47.8
	2 times	575	26.4	1,149	36.7	1,724	32.5
	3 times	85	3.9	128	4.1	213	4.0
	More	0	0.0	143	4.6	143	2.7
	Total	2,177	100	3,130	100	5,307	100
Grains like corn, rice, wheat, oats, sorghum	None	196	9.0	235	7.5	431	8.1
	1 time	996	45.8	1,433	45.8	2,429	45.8
	2 times	928	42.6	1,181	37.7	2,110	39.8
	3 times	39	1.8	242	7.7	281	5.3
	More	18	0.8	38	1.2	56	1.1
	Total	2,177	100	3,130	100	5,307	100
Squash, carrot and pumpkins	None	1,724	79.2	1,993	63.7	3,717	70.0
	1 time	364	16.7	987	31.5	1,351	25.5
	2 times	88	4.1	150	4.8	239	4.5
	Total	2,177	100	3,130	100	5,307	100
Roots or tubers such as potatoes, cassava, banana,	None	355	16.4	537	17.1	892	16.9
	1 time	1,075	49.7	1,677	53.6	2,753	52
	2 times	729	33.7	841	26.9	1,571	29.6
	3 times	2	0.1	36	1.1	38	0.7
	More	3	0.1	38	1.2	41	0.8
	Total	2,164	100	3,129	100	5,295	100
Green leafy vegetables	None	1,368	62.9	1,833	58.6	3,201	60.3
	1 time	589	27.1	1,094	35.0	1,683	31.7
	2 times	210	9.6	202	6.5	412	7.8
	3 times	2	0.1	0	0.0	2	0.0
	Total	2,177	100	3,130	100	5,307	100
Mango, papaya or guava	None	1,530	70.3	1,758	56.2	3,288	62.0
	1 time	575	26.4	961	30.7	1,536	28.9
	2 times	72	3.3	192	6.1	263	5.0
	3 times	0	0.0	220	7.0	220	4.1
	Total	2,177	100	3,130	100	5,307	100
Other fruits (bananas, apples, avocados, oranges, pineapples, etc.)	None	1,198	55.0	1,213	38.8	2,411	45.4
	1	759	34.9	1,101	35.2	1,861	35.1
	2	163	7.5	698	22.3	861	16.2
	3 times	57	2.6	81	2.6	138	2.6
	More	0	0.0	36	1.2	36	0.7
	Total	2,177	100	3,130	100	5,307	100

When we further analyse the food intake by women differentiating between those that have a regular income and those that have no regular income, we detect marked differences in the food intake: in the low-low level socio-economic group almost nearly twice as much women consume such items all food groups in case there is a regular

income in the household compared to when there is no regular income (Table 19. The difference is less marked for grains and tubers which have lower prices compared with the other food groups and are a basic part of the preferred diet.

Table 19 Proportion of women 15-49 years that do NOT consume certain food items by socio-economic group

	NO CONSUMPTION (%)			
	Low low level		Middle low level	
	Income	No regular income	Income	No regular income
Water	39.0	61.0	43.2	56.8
Commercial infant formula	35.2	64.8	45.2	54.8
Any kind of milk	37.1	62.9	41.6	58.4
Fruit juice	26.6	73.4	44.0	56.0
Another kind of liquid	38.7	61.3	30.0	70.0
Legumes: lentils, beans, soya or peanuts	39.2	60.8	46.0	54.0
Cheese or yoghurt	33.9	66.1	43.8	56.2
Meat, fish, other seafood or eggs	19.9	80.1	52.3	47.7
Food made from grains like corn, rice, wheat, oats, sorghum	42.8	57.2	30.4	69.6
Squash, carrots, pumpkins, etc.	37.1	62.9	45.5	54.5
Roots and tubers like potatoes, and cassava	44.4	55.6	30.1	69.9
Green leafy vegetables	33.1	66.9	42.0	58.0
Mango, papaya and guava	38.0	62.0	46.5	53.5
Other fruits (like apples, avocados, oranges, pineapples, etc)	32.3	67.7	59.8	40.2
Sugar, brown sugar and other sweets	24.0	76.0	42.5	57.5

Table 20 shows that about 65% of the households are having three meals a day and 22 % of the households only have two meals a day. The latter is concerning.

Table 20 Number of meals eaten per household per day by socio-economic group

	Socio-economic Group					
	Low-low		Middle-low		Total	
	n	%	n	%	n	%
One	47	2.6	12	0.4	58	1.3
Two	399	22.3	564	19.8	963	20.7
Three	1,162	64.8	1,880	65.9	3.042	65.5
Four or more	184	10.3	395	13.8	579	12.5
Total	1,792	100	2,851	100	4,643	100

3.3 Sources of food

The households in the middle-low socio-economic group indicate that they purchasing in shops and markets is their main source of food (96.1%), for the low-low income level this was 85.6 %. For the low income groups also the food assistance programmes (8 %) and own food production (5.3 %) were main sources of food. In the middle income group nearly 4 % of the households had their own food production as the main source of food (Table 21).

Table 21 Main sources of food by socio economic group

	Socio-economic Group					
	Low-low		Middle-low		Total	
	n	%	n	%	n	%
Purchased	1,535	85.6	2,851	96.1	4,480	96.5
Own food production	94	5.3	111	3.9	0	0.0
Food assistance	143	8.0	0	0.0	143	3.1
Other	20	1.1	0	0.0	20	0.4
Total	1,792	100	2,740	100	4,643	100

The FGD participants mentioned that approximately 80 % of the households in the low-low socio-economic group that are unemployed or otherwise don't have enough income to support their families, receive food donations.

3.4 Changes in the diet

Table 22 indicates that about 43% of the households in San Cristobal perceived changes in the diet (46.4 % in low and 43.3 % in middle socio-economic group).

Table 22 Perception of changes in diet in the last year (% of households)

	Socio-economic group					
	Low-low		Middle-low		Total	
	n	%	n	%	n	%
Yes	832	46,4	1,181	41.4	2,012	43,3
No	960	53,6	1,671	58.6	2,631	56,7
Total	1,792	100	2,851	100	4,643	100

Of the surveyed households 16% indicate that the quantity of food has changed while 7 percent indicates a change in quality and 20% in both quantity and quality of the food (23.5 in low income group and 17.7 in middle income group) (Table 23).

Table 23 Type of change in the diet in the last year (% of households)

	Socio-economic group					
	Low-low		Middle-low		Total	
	n	%	n	%	n	%
Change in the quantity	277	15.5	456	16.0	733	15.8
Change in quality	112	6.2	214	7.5	325	7.0
Change in quantity & quality	421	23.5	506	17.7	926	19.9
Change in type of foods	42	2.3	38	1.3	80	1.7

Of the households 21 percent now consume less food then a year ago (24.8 % in low low group and 19.2 % in middle-low socio-economic group), while nearly 6 % consume more than last year (table 24).

Table 24 Change in quantity of food in the last year (% of households)

	Socio-economic Group					
	Low-low		Middle-low		Total	
	n	%	n	%	n	%
Same	1,247	69.6	2,142	75.1	3,389	73.0
Less	444	24.8	546	19.2	991	21.3
More	101	5.6	163	5.7	264	5.7
Total	1,792	100	2,851	100	4,643	100

According to the participants in the FGDs feeding practices have changed substantially due to the economic crisis. For example, participants from both socio-economic groups, but more so in the low-low socio-economic group, expressed that the economic crisis has notoriously decreased the consumption of beef, milk and cheese due to its high price. Protein intake now depends more on consumption of eggs and dry legumes. But there is also continuity: the FGD participants indicate that they have a preferential diet that is based on rice, potatoes and banana. This food makes part of the local feeding culture and is maintained as much as possible.
The participants also observed the value of the social feeding programmes since this complements the food they can afford themselves both in quantity and quality.

3.5 Changes in food prices and expenditure patterns

The food items that showed largest increase in price during the preceding year were potato (33 % increase), tubers and bananas (18.3 %) fish and other sea foods (7%) However, prices of vegetables and legumes (-6.6%) and cereals (-3.9%) lowered, while price of dairy products and eggs (1.2%),meat (1.4%) and fruits (1.7%) showed a moderate increase only (Mayor of Bogota, 2009).
The majority of the households in the sample (nearly 85%) considered that food prices have increased in the past year (table 25).

Table 25. Perception of change in food prices by socio-economic group

	Socio-economic group					
	Low-low		Middle-low		Total	
	n	%	n	%	n	%
Yes	1,488	83.1	2,446	85.8	3,934	84.7
No	304	16.9	406	14.2	709	15.3
Total	1,792	100	2,851	100	4,643	100

Table 26 shows that 74 % of the surveyed households currently in average spent about half or more than half of their income on food (with 30% of them spending clearly more than half of their income on food).

Table 26 Proportion of income spent to food by socio-economic group

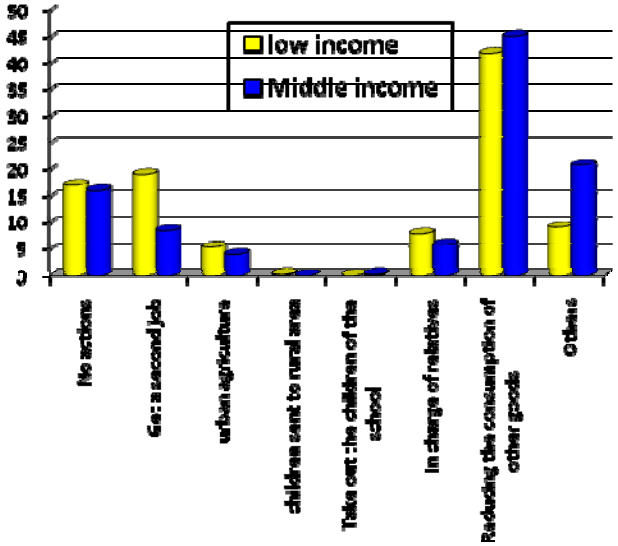
	Socio-economic Group					
	Low-low		Middle-low		Total	
	n	%	n	%	n	%
Nothing	15	0.8	0	0.0	15	0.3
Almost nothing	19	1.1	46	1.6	65	1.4
Less than half	434	24.2	680	23.8	1,114	24.0
About half	694	38.7	1,308	45.9	2.002	43.1
More than half	567	31.6	724	25.4	1,291	27.8
Everything	62	3.5	93	3.3	155	3.3
Total	1,792	100	2,851	100	4,643	100

In comparison: in 2007 it was reported that the households spent in average 57.4% of their income on food (DANE – SDP, 2008).

3.6 Coping strategies

Figure 18 gives an overview of the main coping strategies applied by the housheholds in the low-low and middle low income areas of Bogota.

Figure 18 Coping strategies applied by the households by socio-economic group



The participants in the Focus Group Discussions (FGD) emphasized that this last year the households have reduced the amount and quality of the food they consume. They estimate that they decreased this last year in average their expenditures on food by 20% compared to last year. The FGD participants report that the number of meals per day has not changed substantially compared to the year before, but that the amount of food that is consumed in each serving has dramatically decreased in order to reduce costs, while more expensive items are replaced by cheaper food items. In this regard, the participants report that the consumption of beef, milk and cheese has been restricted replacing it partly by meat offal, chicken, eggs and legumes. "*We used to have a soup and main dish, now if we cook soup we cannot cook the main dish". "Formerly we ate soup and the main dish, now all we eat is a broth and potato*". *"We used to eat beef every third day, now I can only buy beef at home when there is some money remaining after buying the groceries, if not, we do not buy beef*".

Some of the families with children in elementary or high school have opted to take their children out of the school, especially those who are studying in high school, even though parents perceive that education is vital for their children. Many of them have difficulty to cover for the tuition fees, board and costs of transportation and educational materials. However, it is important to indicate that government seeks to motivate poor households to maintain their children within the educational system by providing educational subsidies while also other programmes such as “Families in Action” provide educational support.

The FGD participants observed a slight increase in the number of people that engage in urban agriculture in this last year due to the economic crisis. As possible reasons why local food production has not grown more, the FGD participants mention: a. in the periods they have a job that can’t attend their garden/animals b. only the households that have access to some land can do it c. the high mobility of the households.

Other coping strategies mentioned by the FDGs that are practiced by the households to respond to rising food prices and lowering income include the following:

- To be more efficient with the available food, e.g. buying food items that last longer and that can easily shared among many household members; also dividing prepared food in small portions so that something can be saved for the next day, is practiced.
- Not to buy food prepared outside of household.
- Buy vegetables and fruits of the season since these are the cheaper ones.
- Look for marketplaces where products are lower priced.
- Stop buying food based on the brand and rather choose them according to the lowest price (specifically in the middle scoop-economic group).
- To collaborate with the extended family. Many families expressed that they had joined with other members of the extended family in order to reduce costs by sharing one single housing unit together or by providing lunch to grandchildren and sisters-in-law / sons-in-law.
- Take up informal jobs: petty trade in streets and busses, work paid per unit e.g. shoes or dresses, domestic work, but also begging and other “moonlighting”.
- Reduce costs of other commodities and services such as clothing and recreation in order to have more money available for food. The key informants note that the households can not reduce expenses on rent, payment of utilities and health, which all have the tendency to rise and have to be paid first.
- Apply for admission to the supplementary feeding programmes, such as community kitchens, school snacks, food supplement markets (mainly accessible for households in the low-low socio-economic group).

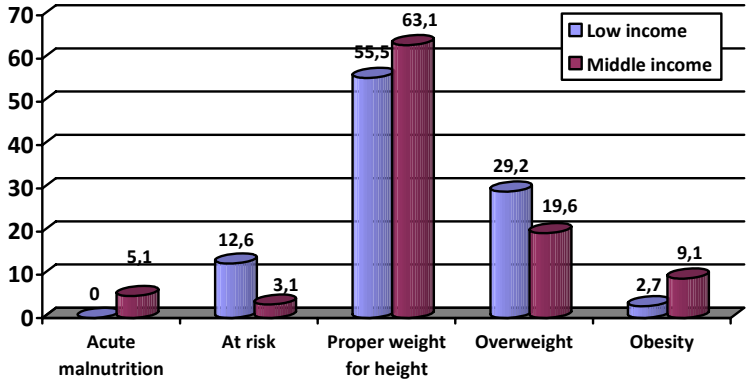
The FGD participants, especially in the middle income group, explained that their first priority was to pay the rent, then to pay the rent and public utilities (water, energy, gas and telephone). Once the above was covered they devote the rest of the money to food. Expenses for education and health are found at the end of the priority list of these households. *“Today it is no longer only food a priority; the public utilities are also a priority”. First you pay for utilities and rent, and the remainder is left for food, school and health if there is some money left”*.

3.7 Nutritional status of young children and women in the fertile age

The analysis of the nutritional status of young children was based on the collected anthropometric measurements and the standards of the World Health Organization (see Table 8 above).

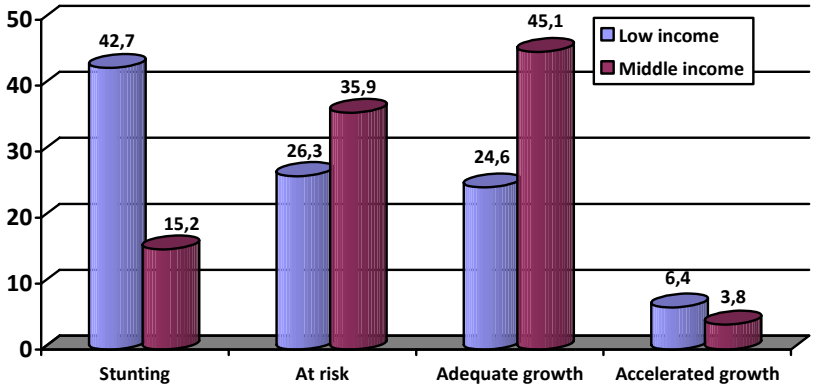
Figure 19 presents the results based on Weight for Height, an indicator of acute malnutrition, indicating that 5 % of the young children (only in the middle-low socio-economic group!) are with acute malnutrition (wasting) while 12.6 % of children in the low-low group and 3.1 % on the middle-low income group are at risk. That no acute malnutrition was found in the low low socio-economic group might be due to the local government supplementary feeding programme (8 % of the households in the low income group receive food assistance against no household in the middle income group).
Overweight ranges between 29.2 percent (low-low socio-economic group) to 19.6 % (middle-low socio-economic group), while 2.7 % of the children in the low-low socio-economic group and 9.1 % in the middle-low socio-economic group are obese.

Figure 19 Nutritional status of children 0-5 years by socio-economic group (based on Weight for Height)



The results based on Height to Age (Figure 20), an indicator for chronic malnutrition, is highly revealing with respect to the food condition of the minors in the low-low socioeconomic level, since 42.7 % of the children in this socio-economic group have a delayed growth (stunting) while 26.3 % are at risk (15.2 % and 35.9 % in the middle-low socio-economic group).

Figure 20 Nutritional status of children less than six years of age (based on Height to Age)



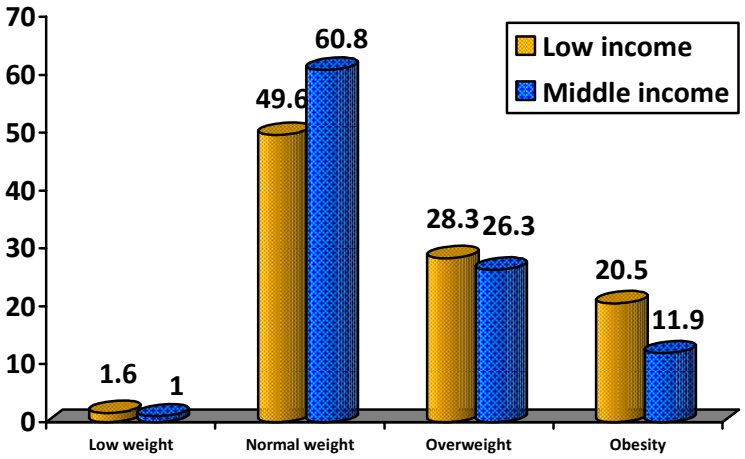
In 2005 (ICBF, 2006) delayed growth was found for only 13.4 percent of the children in the low-low socio-economic group and 19% in the middle low economic class, which seems to indicate that chronic under-nutrition in the low low income group had increased these past years.

The nutritional status of women in the fertile age (15 to 49 years) was assessed with help of the collected Body Mass Index data, applying the following categories:

- Low weight: BMI less than or equal to 18.5 kg
- Normal Weight: BMI 18.5 - 24.9 kg
- Overweight: BMI 25-29.9 kg
- Obesity: BMI equal or more than 30 kg.

The results (Figure 21) indicate that 38 % of the women in the fertile age in the low income group and 49 % of the women in the middle income group are overweight or obese. This could be expected based on the results of the data regarding the consumption pattern, since their diet in general consists of a high consumption of cereals, tubers (like potato, cassava) and banana, accompanied by some animal protein, while many of them (over 60%) don't consume fruits and vegetables.

Figure 21 Nutritional status of women 15-49 years by socio-economic group



3.8 Policy responses to the financial and food crises.

Colombia counts with the national food and nutrition security policy instituted in the year 2007 (Compes 113, 2007), replacing the national food and nutrition plan (1995 -- 2006). The new policy was written with participation of many agencies at the national, departmental and municipal level as well as with stakeholders of civil society, academics, experts and international agencies and is linked to the national developmental plan and its goals regarding the MDGs (millennium development goals). The ultimate goal of the policy is that all persons have "a sufficient, timely and adequate feeding". The main lines of the policy relate to: a) Food availability, b) Physical and economic access to food, c) Food consumption, d) Biological utilization of food e) Food quality and food safety, which are interconnected.
The new policy made it possible for stronger integration of this topic into the national public agenda and enforced the cooperation in this area among several institutions. An inter-sectoral commission for food and nutrition security (CISAN) that coordinates the implementation of the national food and nutrition security policy.

In the national context, Bogota is one of the leading cities in food and nutrition security issues. Bogota established an inter-sectoral commission of food and nutrition including the Secretariats of Health, Education, Social integration, Economic development, Environment, the Botanic Garden and IDIPRON and created a technical support unit to foster the development of a local food and nutrition security plan.
Within the institutional framework described above, Bogota has accomplished great advances in comparison with other cities in the country, especially due to the special attention given to food and nutrition issues by the former administration of Mr. Luis Eduardo Garzón with the programme "Bogota without hunger" and the current administration by Mayor Samuel Moreno with the programme "Bogota well fed". These two administrations have consolidated food supplement programs including: vouchers that are exchangeable for food, community kitchens and food provided in schools and kindergartens. By means of these programmes, Bogota is attending all age groups giving priority to the most vulnerable population.

The programme with the highest acceptability is the children kindergarten program, which is considered an excellent program by the FGD participants and interviewed experts because it ensures balanced feeding of children from nine months to five years of age in households from low-low socio-economic level, also constituting a relief for their parents. "*In the kindergarten children are used to have for breakfast cheesecake, egg, chocolate and bread, in the kindergarten they eat well; it is a great help because they are not asking for money now, while previously we had to pay 20,000 Colombian pesos per month".* FGD's mention as a critical point that the lot of paperwork and the lengthy procedure -many months- to ensure admission of the child to the kindergarten.
The community kitchens are perceived by the FGD participants as a programme that benefits persons exposed to higher vulnerability. However, participants insisted that the coverage is very limited and that many persons that want to enter the programme cannot participate.
Regarding the programme that provides vouchers that are exchangeable for food, the FGD participants emphasize that this programme benefits the poor families and that it has become an important aid for them, although coverage is limited. The programme also is introducing better food practices.

Aside from this type of programmes, which are focusing on improving the nutrition and food situation of vulnerable population, it has also started to develop institutional responses oriented at prevention. A clear example of this is the generation of the master food supply and food security plan of Bogota city "Feeding Bogota" (Mayor of Bogota, 2006), which mainly responds to the food availability component of the food and nutrition security policy. The master supply and food security plan of Bogota city that starts from the concept of "city region" and seeks to develop an efficient regional food supply system and secure a supply of food of high-quality and a lower price to the consumers, expecting to realize a 10% reduction in the cost of the basic food package by 2019. The programme also seeks to enhance knowledge, information and joint acting capacity of the various stakeholders in the food supply chains, and to undertake actions promoting healthy consumption habits and proper purchasing practices by the population.

In the opinion of interviewed experts Bogota presents three key elements which have permitted the city to advance in the food and nutrition security area:

1. Political willingness. During the interviews the experts stressed the importance of the special interest of the former and current administration to implement a food and nutrition security policy
2. Inter-sectoral cooperation. The experts highlighted the relevance of existing efforts to link the actions of various secretaries and institutes committed to the

district policy and the role of CISAN and the technical support unit, although the interviewed experts also indicate the existence of many limitations in the inter-sectoral work as it is implemented at the moment. The main challenge is to enhance coverage and to ensure that the institutional programmes are really complementary, so that a beneficiary not only receives food but also receives tools enabling him or her to overcome poverty and to become productive.

3. Empowerment of the communities. The experts see this as the main element and observe that the communities have begun to see access to food as a fundamental right and not as charity and therefore have started to demand their direct participation in the management of food and nutrition programmes. To that effect the community organisation and their participation in the administration of these programs at the local and community level needs to be reinforced and local understanding that such programmes should reach the persons most in need of the programme (and not be used for individual or political gain) needs to be enhanced.

4. CONCLUSION

The study on the effects of the global financial crisis on the food security of poor urban households in Bogotá had the following main outcomes.

When confronted with the effects of the global financial crisis on the prices of food, the households in both low and middle income group sought to reduce their expenditures. Since rent, utilities and health costs have to be paid anyhow, the households mainly sought to reduce their food costs by reducing the amount of food that is consumed in each serving as well as by replacing more expensive food items by cheaper ones, which made that the consumption of beef, milk and cheese reduced considerably and is replaced it partly by bread tortillas, meat offal, chicken, eggs and pulses.

The anthropometric data show that chronic malnutrition (indicated by delayed growth) has increased in both socio-economic groups, but especially the low-low income group (42.7 % children stunting in the low income group and 19% in the middle income group) as compared to 2007 despite the fact that strong supplementary feeding programmes exist in the city. .However, these programmes may have contributed to the reduction of acute malnutrition in the low-low income groups (but not in the middle-low income group: 5 % children is wasted).

The anthropometric data also show that the changes in the food pattern also lead to more overweight and obesity especially amongst the women.

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ANNEX 1 Survey questionnaire